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INSECTA**Integrative Science Education and Teaching Activity Journal**Journal homepage : <https://jurnal.iainponorogo.ac.id/index.php/insecta>

Article

Analysis of The Difficulty of Exam Questions at State Junior High SchoolsNeli Agustin^{1*}, Septi Utari Putri², Rafikan Aria ganda³, Ahmad Walid⁴^{1,2,3,4}Universitas Islam Negeri Fatmawati Sukarno Bengkulu, Indonesia**Corresponding Address: ustiagustin2@gmail.com***Article Info**

Article history:

Received: March 27, 2022

Accepted: April 20, 2022

Published: May 30, 2022

Keywords:

Material Analysis;

Item Difficulty Index;

Midterm Exam;

ABSTRACT

The study aims to analyze level of difficulty of the exam questions for Class VII and VIII at junior high school Negeri 05 Bengkulu City. This study used a qualitative descriptive research design. The instrument used in this study was the text of the science exam questions for junior high school and equivalent. Higher order thinking skills are not only formed in the cognitive aspect but are able to improve the skills and effective aspects of students. One of them is the collected data is analyzed using the Difficulty Index formula. Data analysis used descriptive percentage. Calculate the individual value of each student in class VIII A of junior high school Negeri 05 Bengkulu City. The results showed that the analysis of the difficulty level of science exam questions for class VIII and VII Junior high schools Negeri 05 Bengkulu City for the 2020/2021 academic year had a difficult question category in class VII of only 30%, the easy question category was 70%, as well as class VIII. difficult category questions, 30% of easy category questions, 30% moderate questions 40%. This shows that the quality of the exam questions is very good. A good measuring instrument test will produce good data, the teacher can know the student's ability correctly if the measuring instrument used is a good measuring instrument. Questions have very good/very good discriminating power. Matter of material, construction and some parts of the language need to be improved. Data collection tools used are through note takers and interview guides.

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INTRODUCTION

The level of difficulty of the questions was the proportion between the number of test takers who answered the questions correctly and the number of test (Azwar, 2006). In terms of language, assessment is defined as the process of determining the value of an object. This able to determine the value or price of object, a measure or criterion is needed (Nana Sudjana, 2010). Assessment is an activity carried out to measure and assess the level of curriculum achievement. Evaluation is part of the process and as a whole cannot be separated from learning activities. Evaluation activities have been regulated in the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Chapter XVI,

Article 58 paragraph 1, stating. One of the basic goals of education is to develop skill of student conclusions. This skill can be improved through problem integration socio-scientific learning because the application of scientific knowledge is one of the main concern of the subject matter. In exposing students to these problems, they will share the responsibility of assessing questions about moral issues related to technology.

This is an attempt to equip them with the ability to assess the increasing amount of information in everyday life they. Can also be used to direct them to be more understanding and simplify their increasingly complex ideas. In previous years, science learning has inspired many students to continue pursuing a career in applied science or in a science-related field such as engineering and medicine. Thus, there really is a growing interest in using aspects socio-scientific science to spark student interest and build a sense of responsibility them as they explore the practical utility of science and the potential of technology in human Resource Development. Moreover, socio-scientific education has established the main one, namely the aim of promoting the development of students' moral judgments and ethical values especially during guided learning (Gutierrez 2015). Therefore, the evaluation of learning outcomes aims to assess competency achievement and improve the learning process as well as guidelines for preparing student learning progress reports. And in carrying out a good evaluation system, it is expected to be able to measure student abilities and measure the actual quality of education (Nadya, et al, 2018). With question analysis, information about the ugliness of a question can be obtained and directions for improvement. Quality questions are questions that can provide information precisely according to the objectives, including determining which students have or have not mastered the material taught by the teacher (Sartika, 2013).

The purpose of this study was to analyze the difficulty level of the Science Questions Exam Questions At State Junior High Schools In 05 Bengkulu Cities for the 2020/2021 Academic Year. As stated by (Arifin, 2009: 270) which states that, the criteria for interpreting the level of difficulty of the questions are: 1) If the percentage is up to 27%, it is easy. 2) If the total percentage is up to 28% -72%, it is moderate. The evaluation process is carried out to determine the extent to which the learning objectives have been achieved. In addition, evaluation can also be used as a tool to take what actions will be taken next. "Bloom (Daryanto, 2001: 1)". Each subject above, of course, has a different level of difficulty for students. Some have high, medium, and low levels of difficulty for students to understand." (Purwanto, 1994) "Evaluation is an activity carried out to measure the teaching and learning process of students. The exam questions used as measuring tools must be able to provide accurate information on the abilities of students. "Sudaryono, (2012)".

METHODS

The instrument used in this study was a text for military intelligence department Exam science subjects for junior high school in the academic year 2020/2021. This study was intended to find information and data that can be used to describe the quality of this school. Based on research that has been done through interviews with class VII totaling 160 students, with the science subject teacher VII with his father, and the science teacher in class VIII with his mother, he stated that the number of students in class VIII is 62 students.

The data in this study were collected using documentation and interview techniques. Documentation is a record of events. Documents can be in the form of writing, pictures, or from someone (Sudjana, 2011: 135). Bengkulu documentation for the 2020/2021 school year. The level of difficulty is a measure of the degree of difficulty of a question and the opportunity to answer questions correctly at a certain level of ability which is usually expressed in the form of an index (Aziz 2016:18). Difficulty index was analyzed for each item. The number of questions in this study were 10 question items. The data that has been

collected will be analyzed using the difficulty index formula with the formula: $p = \frac{b}{js}$ where p = difficulty index, b = the number of students who answered the questions correctly, and js = the number of students.

RESULTS AND DISCUSSION

Data on the Analysis Of The Difficulty Of Exam Questions At State Junior High Schools In 05 Bengkulu Cities on the teacher problem points on vibration and wave material. The Results should be clear and concise. The results should summarize (scientific) findings rather than providing data in great detail (Ahmadjayadi 2003). Table and Graphics are presented center, as shown below and cited in the manuscript.

Table 1. Value Analysis Results

Category	Item for Class VII	Total	Persentase	Item for Class VIII	Total	Persentase
Essay	3,4,5	3	25%	5,6,22,28	4	15%
Ganda	1,5,7,11,28,29	6	75%	1,2,3,4,5,6,7,8,9,10	10	85%

From the results of this study, it was found that the exam questions for grades VII and VIII Analysis Of The Difficulty Of Exam Questions At State Junior High Schools In 05 Bengkulu Cities for the 2020/2021 Academic Year with science lessons had the percentage of questions for VII Essays: 25% and double 75% and for class VIII Essays 10% and doubles 85 %.

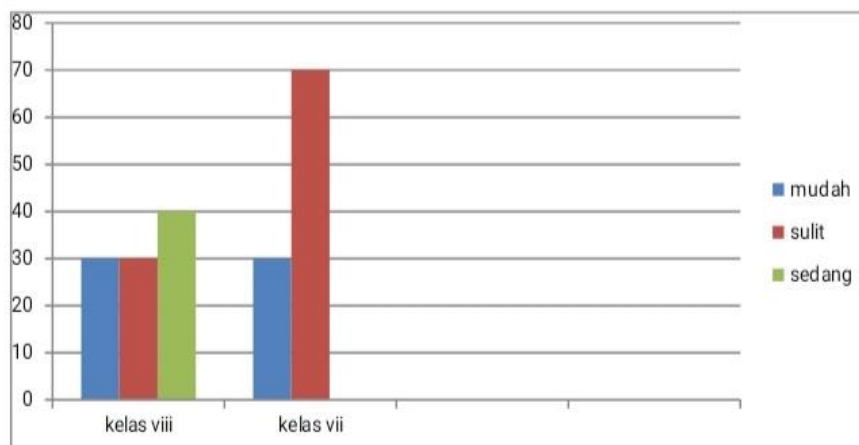


Figure 1. Percentage Difficulty Index

Based on the results of the research we conducted at the state junior high school in 05 Bengkulu cities, we can explain that for class VIII science questions, the percentage of easy questions is 30%, 30% is difficult and 40% is moderate, and for class VII it is in the category of easy 30% and difficult questions. 70%. At junior high school in 05 Bengkulu City for the 2021/2022 academic year it is not reliable. For the level of difficulty, it is categorized into difficult group. This is due to the possibility that the preparation of the questions does not pay attention to the rules that have been set or the preparation of the questions is not according to the rules of making the questions. Based on the results of the analysis of the data above, it can be stated that the hypothesis which states that the level of difficulty of the subject matter formulated by the teacher of junior high school in 05 Bengkulu City "is probably not good, when compared to class VII and class VIII the questions made for class VII are more.

Why is it difficult because the question uses more essay questions than doubles, therefore essay questions require more understanding and study to be able to answer the test questions they do so that they get satisfactory grades. said that the level of item difficulty is the proportion between the number of test takers who answered the item correctly and the

number of test takers Saifudin Azwar (2006:129). The discriminatory power of a question is the ability of a question to distinguish between smart students (high ability) and students who are less intelligent (low ability). In the level of difficulty, discriminatory power, and distractors are expected to be able to provide accurate information about students' actual abilities. Through Exam Questions, the teacher will find it easier to know or measure the level of ability of his students. Students are given the opportunity to explore answers from understanding and experience as freely as possible with discussions related to material that has been studied previously in learning. It can be seen that students are able to complete the task very well regardless of the assessment, the work is carried out on the spot.

The difference between students who have low ability to draw conclusions, especially on the indicators of translating or identifying questions, is still very far from the scores on other indicators, especially on the KKM score. The ability to translate or identify these questions still really needs to be improved to produce students with the ability to draw good conclusions in terms of answering questions or solving a problem. In connection with To collect the data, the researcher uses several criteria on each indicator to provide an assessment of how well students are able to draw conclusions in complete the given problem or task. Interesting ability observations In essence, the question is not difficulty if a student takes the test study first and do the practice questions at home the thing that makes it difficult is his ability to prepare for the exam, he lacks study and practice questions at home which makes him feel that the questions given by the teacher are difficult to do. Based on this statement, in the process of completing exam questions, assignments or problems faced, then educators must often be given independent assignments later students are able to think critically and analyze related solutions in solving problems the problem with its capabilities.

In this indicator, students have often been trained, so the results obtained are quite good compared to other indicators. Meanwhile, in terms of the aspect of translating or identifying questions of ability, drawing conclusions is an ability with the following characteristics: students already understand the problems that have been packaged, then determine the problem what he has understood, and what problems the question will pose. Such that proposed by (Nurrega et al., 2018) that the analysis process is when students try to collect and understand all relevant information related to their answer choices that have not been achieved well.¹ These characteristics are used to provide an assessment using a question instrument that must be answered by participants. learn to the best of their abilities. However, in the above data collection, indicators of ability to translate or identify scoring questions using criteria created with concepts in mind rather than attractiveness the conclusion. Indicator of ability to design or plan problem solving includes the ability to draw conclusions by answering questions that have been presented with the process of understanding the material that has been studied at the meeting previously.

The assessment criteria for the ability to design or plan problem solving, namely students choose a strategy or method that will be used in solving a problem presented. From the results obtained, it shows that the percentage of achievement of the ability to draw conclusions in the aspect of planning for completion shows moderate criteria compared to other indicators with a score of 52.78. Although the ability to draw conclusions in the aspect of designing or planning to solve the problem, the results look moderate from other indicators, but still cannot meet the standard or low category, because the value is less than the Minimum Completeness Criteria (KKM) determined by the school, that is > 75 .

The obstacles experienced by these students are most likely due to factors such as: do not understand related to planning a solution or the purpose of the question. There are still many students who ask questions related to problem solving plans, besides the material or concepts related to problems that they have not mastered properly, so that they feel confusion

in terms of answering questions but it also affects the results. Aspect designing or planning problem solving can train students to the ability to design or plan problem solving, so that students will be more understand and understand the meaning of the questions presented. In addition, students able to channel the results of their understanding with the process of designing or planning problem solving, so as to be able to answer the questions presented properly. It can be seen that students are able to complete the task well regardless from the assessment, the work is done at the same time. Differences between students who have the ability to draw good conclusions, especially in designing indicators or planning to solve the problem is still far from the scores on other indicators, especially on the KKM score.

CONCLUSION

Based on the results of the research that has been done previously, it can be concluded that the level of difficulty of questions for class VIII and VII at junior high school in 05 Bengkulu City has a category of difficult questions in class VIII which is only 30%, the category of easy questions is 30%, and the category of medium questions is 40 %. Likewise, Class VII only has 30% difficulty question category, 70% easy question category, and 60-70% moderate question category. The assessment criteria for the ability to design or plan problem solving, namely students choose a strategy or method that will be used in solving a problem presented. From the results obtained, it shows that the percentage of achievement of the ability to draw conclusions in the aspect of planning for completion shows moderate criteria compared to other indicators with a score of 52.78. Although the ability to draw conclusions in the aspect of designing or planning to solve the problem, the results look moderate from other indicators, but still cannot meet the standard or low category, because the value is less than the Minimum Completeness Criteria (KKM) determined by the school, that is > 75 . This shows that the quality of the Exam Questions At State Junior High Schools In 05 Bengkulu City questions is very good. The author hopes that with the article on the analysis of the difficulty of semester items Exam Questions At State Junior High Schools In 05 Bengkulu City, this research can improve the ability of teachers to analyze items and it would be nice if the school was willing to provide training for teachers so that the questions given were of higher quality and able to measure their abilities. students so that the level of critical thinking skills of a student in answering questions. The ability to draw conclusions is influenced by students' understanding of the material that has been delivered, based on this, educators play an important role in developing the ability to draw conclusions from students.

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